

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method in an Asynchronous Transfer Mode (ATM) network including an ingress switch and an egress switch, where ~~said the~~ ingress switch serves an ingress device operated by a calling party and ~~said the~~ egress switch serves an egress device operated by a called party, the method comprising:

receiving, in ~~said the~~ ingress switch, a signaling message from ~~said the~~ ingress device;

providing ~~said the~~ signaling message to a signaling intercept processor associated with ~~said the~~ ingress switch;

propagating ~~said the~~ signaling message, from the signaling intercept processor to a policy server, ~~said the~~ policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, of a group of policy features, with which the related subscriber is associated;

identifying, in the policy profile database and based on the signaling message, a policy for the calling party;

determining, in the policy server and based on the signaling message, that the policy for the calling party is to be enforced;

executing, in ~~said the~~ policy server and based on ~~said the~~ signaling message, appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party;

determining whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to ~~said the~~ signaling message, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and where determining whether the policy condition associated with each policy feature is satisfied comprises:

calculating a bandwidth for the signaling message,

determining whether the calculated bandwidth exceeds a requested bandwidth, and

determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth; and

establishing a connection path between ~~said the~~ ingress switch and ~~said the~~ egress switch based on ~~said the~~ determination that ~~said the~~ policy condition is satisfied for each policy feature, of the one or more policy features identified by the policy for the calling party.

2. (currently amended) The method in an ATM network as set forth in claim 1, where ~~said the~~ signaling message comprises a Connect message.

3. (currently amended) The method in an ATM network as set forth in claim 1, where ~~said the~~ signaling message comprises an Add Party message.

4. (currently amended) The method in an ATM network as set forth in claim 1, where ~~said the~~ signaling message comprises a Release message.

5. (currently amended) The method in an ATM network as set forth in claim 1, where ~~said the~~ signaling message comprises a Setup message.

6. (currently amended) The method in an ATM network as set forth in claim 5, where ~~said the~~ one or more policy features, identified by the policy for the calling party, further comprises a source address validation feature, and

where [[the]] determining whether [[a]] the policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the calling party is within a range of authorized addresses, and

determining that the policy condition is satisfied for the source address validation feature when the address, associated with the calling party, is ~~determined to be~~ within the range of authorized addresses.

7. (currently amended) The method in an ATM network as set forth in claim 5, where ~~said the~~ one or more policy features, identified by the policy for the calling party, further comprises a maximum call attempt rate limit feature, and

where [[the]] determining whether [[a]] the policy condition associated with each policy feature is satisfied comprises:

determining whether the signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determining that the policy condition is satisfied for the maximum call attempt rate limit feature when the signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

8. (currently amended) The method in an ATM network as set forth in claim 5, where ~~said the~~ one or more policy features, identified by the policy for the calling party, further comprises a destination address screening feature, and

where [[the]] determining whether [[a]] the policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the called party is within a list of address ranges to which the calling party is allowed to call, and

determining that the policy condition is satisfied for the destination address screening feature when the address, associated with the called party, is ~~determined to be~~ within the list of address ranges to which the calling party is allowed to call.

9. (currently amended) The method in an ATM network as set forth in claim 5, where the method further comprises:

identifying a policy for the called party, the policy for the called party including a source address screening feature;

determining that the policy for the called party is to be enforced;

determining whether a policy condition associated with the source address screening feature is satisfied with respect to the signaling message, where ~~[[the]]~~ determining whether the policy condition association with the source address screening feature is satisfied includes: ~~[[:]~~

determining whether an address associated with the calling party is within a list of address ranges from which the called party is allowed to receive calls; and

determining that the policy condition is satisfied for the source address screening feature when the address, associated with the calling party, is ~~determined to be~~ within the list of address ranges from which the called party is allowed to receive calls, and

where the establishing the connection path is based on whether the condition is satisfied for the source address screening feature.

10. (currently amended) The method in an ATM network as set forth in claim 5, where ~~said the~~ one or more policy features, identified by the policy for the calling party, further comprises a maximum burst size limit feature, and

where ~~[[the]]~~ determining whether ~~[[a]]~~ the policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in the signaling message exceeds a limit, and

determining that the policy condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

11. (canceled)

12. (currently amended) The method in an ATM network as set forth in claim 5, where ~~said~~ the one or more policy features, identified by the policy for the calling party, further comprises a service class selection feature, and

where [[the]] determining whether [[a]] the policy condition associated with each policy feature is satisfied comprises:

determining a requested class of service based on the signaling message,
determining whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determining that the policy condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

13. (currently amended) The method in an ATM network as set forth in claim 5, where ~~said~~ the one or more policy features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature, and

where [[the]] determining whether [[a]] the policy condition associated with each policy feature is satisfied comprises:

determining whether a quantity of concurrent calls, if a call is established between the calling party and the called party, exceeds a maximum number of concurrent calls,
and

determining that the policy condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

14. (currently amended) An Asynchronous Transfer Mode (ATM) network for effectuating intelligent policy features with respect to a call to be established between a calling party and a called party, comprising:

an ATM switch serving a customer premises equipment (CPE) operated by the calling party;

a signaling intercept processor associated with ~~said the~~ ATM switch, the signaling intercept processor to intercept a signaling message relative to ~~said the~~ call; and

a policy server associated with ~~said the~~ signaling intercept processor, ~~said the~~ policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each policy of the policies identifies one or more policy features, of a plurality of policy features, with which the related subscriber is associated, where ~~said the~~ policy server is to:

determine that a policy of the policies in the policy profile database, is to be enforced for the calling party,

execute appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party, and

determine whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to ~~said the~~ signaling message, where a connection path ~~being~~ is established when the

policy condition for each policy feature, of the one or more policy features identified by the policy for the calling party, is ~~determined to be~~ satisfied, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature for determining a maximum bandwidth allowable for a particular network port authorized for use by the calling party, and where, when determining whether the policy condition associated with each policy feature is satisfied, the policy server is to:

calculate bandwidth for the signaling message,

determine whether calculated bandwidth exceeds a requested bandwidth,

and

determine that the condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth.

15. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 14, where ~~said the~~ signaling message comprises a Connect message.

16. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 14, where ~~said the~~ signaling message comprises an Add Party message.

17. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 14, where ~~said the~~ signaling message comprises a Release message.

18. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 14, where ~~said the~~ signaling message comprises a Setup message.

19. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a source address validation feature for ensuring that ~~said the~~ party is an authorized party for accessing ~~said the~~ ATM network through a particular network port associated with ~~said the~~ CPE, and

where, when determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether an address associated with the calling party is within a range of authorized addresses, and

determine that the policy condition is satisfied for the source address validation feature when the address, associated with the calling party, is ~~determined to be~~ within the range of authorized addresses.

20. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 19, where ~~said the~~ particular network port is a Customer Logical Port.

21. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 19, where ~~said the~~ particular network port is a full physical port.

22. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a maximum call attempt rate limit feature for monitoring the number of Setup messages received from ~~said the~~ calling party over a predetermined period of time, and

where, when determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether the signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determine that the policy condition is satisfied for the maximum call attempt rate limit feature when the signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

23. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a destination address screening feature for defining a plurality of addresses to which ~~said the~~ party can effectuate ~~said the~~ call, and

where, when determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether an address associated with the called party is within the plurality of addresses, and

determining that the policy condition is satisfied for the destination address screening feature when the address, associated with the called party, is ~~determined to be~~ within the plurality of addresses.

24. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 23, where ~~said the~~ destination address screening feature is established for a group of subscribers to which ~~said the~~ calling party belongs.

25. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where the ATM network further comprises:

a second policy server to:

identify a policy for the called party, the policy for the called party including a source address screening feature for defining a plurality of addresses from which ~~said the~~ call can be initiated to ~~said the~~ called party,

determine whether a policy condition associated with the source address screening feature is satisfied with respect to the signaling message, where, when determining whether the policy condition association with the source address screening feature is satisfied, the second policy server is to:

determine whether an address associated with the calling party is within the plurality of addresses, and

determine that the policy condition is satisfied for the source address screening feature when the address, associated with the calling party, is ~~determined to be~~ within the plurality of addresses, and

where the connection path is established based on whether the condition is satisfied for the source address screening feature.

26. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 25, where ~~said the~~ source address screening feature is established for a group of subscribers to which ~~said the~~ called party belongs.

27. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a maximum burst size limit feature for limiting a burst-size request associated with ~~said the~~ call, and

where, when determining whether [[a]] the policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether a burst size in the signaling message exceeds a limit,
and

determine that the policy condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

28. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 27, where ~~said the~~ burst-size request comprises the

number of packets per second allowed to be transmitted to ~~said~~ the ATM network with respect to ~~said~~ the call.

29. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 27, where ~~said~~ the burst-size request comprises the number of packets per second allowed to be received by ~~said~~ the called party from ~~said~~ the ATM network with respect to ~~said~~ the call.

30. (canceled)

31. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where ~~said~~ the one or more policy features, identified by the policy for the calling party, comprises a service class selection feature for specifying a service class with respect to a network port used by ~~said~~ the party, and
where, when determining whether ~~[[a]]~~ the policy condition associated with each policy feature is satisfied, the policy server is to:

determine a requested class of service based on the signaling message,
determine whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determine that the condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

32. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, where ~~said~~ the service class comprises a constant bit-rate (CBR) service.

33. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, where ~~said~~ the service class comprises a variable bit-rate (VBR) service.

34. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 33, where ~~said~~ the VBR service is a real-time VBR service.

35. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 33, where ~~said~~ the VBR service is a non-real-time VBR service.

36. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, where ~~said~~ the service class comprises an unspecified bit-rate (UBR) service.

37. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, where ~~said~~ the service class comprises an available bit-rate (ABR) service.

38. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature for specifying the total number of calls allowed concurrently with respect to a network port used by ~~said the~~ calling party, and

where, when determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether a quantity of concurrent calls, if a call is established between the calling party and the called party, exceeds a maximum number of concurrent calls, and

determine that the condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

39. (currently amended) A tangible computer-readable medium operable with an Asynchronous Transfer Mode (ATM) network node, ~~said the~~ computer-readable medium carrying a sequence of instructions provided for executing service logic which, when executed by a processing entity associated with ~~said the~~ ATM network node, causes ~~said the~~ ATM network node to perform a method comprising:

receiving, in ~~said the~~ ATM network node, a signaling message with respect to a call from a calling party, the signaling message being received from an intercept processor;

identifying, in a policy profile database associated with the ATM network node and based on the signaling message, a policy for the calling party, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, of a group of policy features, with which the related subscriber is associated;

executing, based on the signaling message, appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party;

determining whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to ~~said~~ the signaling message, where the one or more policy features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature for determining a maximum bandwidth allowable for a particular network port authorized for use by the calling party, and where the determining whether the policy condition associated with each policy feature is satisfied comprises:

calculating bandwidth for the signaling message,

determining whether calculated bandwidth exceeds a requested bandwidth,

and

determining that the policy condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth does not exceed the requested bandwidth; and

upon determining that the policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to ~~said~~ the signaling message, causing a connection path to be established between the calling party and the called party.

40. (canceled)

41. (canceled)

42. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 39, where ~~said the~~ signing message comprises a Connect message.

43. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 39, where ~~said the~~ signing message comprises an Add Party message.

44. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 39, where ~~said the~~ signing message comprises a Release message.

45. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 39, where ~~said the~~ signing message comprises a Setup message.

46. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 45, where ~~said the~~ one or more policy features,

identified by the policy for the calling party, comprises a source address validation feature for ensuring that ~~said the~~ calling party is an authorized party for accessing ~~said the~~ ATM network node through a particular network port associated with the ATM network node, and

where the determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the calling party is within a range of authorized addresses, and

determining that the policy condition is satisfied for the source address validation feature when the address, associated with the calling party, is ~~determined to be~~ within the range of authorized addresses.

47. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 46, where ~~said the~~ particular network port is a Customer Logical Port.

48. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 46, where ~~said the~~ particular network port is a full physical port.

49. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 45, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a maximum call attempt rate limit feature

for monitoring the number of Setup messages received from ~~said the~~ calling party over a predetermined period of time, and

where the determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied comprises:

determining whether the signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determining that the policy condition is satisfied for the maximum call attempt rate limit feature when the signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

50. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 45, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a destination address screening feature, and

where the determining whether ~~[[a]] the~~ policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the called party is within a list of address ranges to which the callings allowed to call, and

determining that the policy condition is satisfied for the destination address screening feature when the address, associated with the called party, is ~~determined to be~~ within the list of address ranges to which the calling party is allowed to call.

51-53. (canceled)

54. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 45, where ~~said the~~ one or more policy features, identified by the policy for the calling party, comprises a maximum burst size limit feature for limiting a burst-size request associated with ~~said the~~ call, and

where the determining whether ~~[[a]]~~ the policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in the signaling message exceeds a limit,
and

determining that the policy condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

55. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 54, where ~~said the~~ burst-size request comprises a quantity of packets per second allowed to be transmitted to ~~said the~~ ATM network node with respect to ~~said the~~ call.

56. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 54, where ~~said the~~ burst-size request comprises a quantity of packets per second allowed to be received by ~~said the~~ calling party from ~~said the~~ ATM network node with respect to ~~said the~~ call.

57. (canceled)

58. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 45, where ~~said~~ the one or more policy features, identified by the policy for the calling party, comprises a service class selection feature for specifying a service class with respect to a particular network port used by ~~said~~ the calling party, and

where the determining whether ~~[[a]]~~ the policy condition associated with each policy feature is satisfied comprises:

determining a requested class of service based on the signaling message,
determining whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determining that the policy condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

59. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 58, where ~~said~~ the service class comprises a constant bit-rate (CBR) service.

60. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 58, where ~~said~~ the service class comprises a variable bit-rate (VBR) service.

61. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 60, where ~~said~~ the VBR service is a real-time VBR service.

62. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 60, where ~~said~~ the VBR service is a non-real-time VBR service.

63. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 58, where ~~said~~ the service class comprises an unspecified bit-rate (UBR) service.

64. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 58, where ~~said~~ the service class comprises an available bit-rate (ABR) service.

65. (currently amended) The tangible computer-readable medium operable with an ATM network node as set forth in claim 45, where ~~said~~ the one or more policy features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature for specifying the total number of calls allowed concurrently with respect to a particular network port used by ~~said~~ the calling party, and

where the determining whether [[a]] the policy condition associated with each policy feature is satisfied comprises:

determining whether a quantity of concurrent calls, if a call is established between the calling party and the called party, exceeds a maximum number of concurrent calls, and

determining that the policy condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

66. (withdrawn) A memory structure for storing data usable in effectuating intelligent policy features in an Asynchronous Transfer Mode (ATM) network wherein said memory structure is operable with a processing entity associated with a policy server node disposed in said ATM network, comprising:

a data structure having a list of subscribers wherein said subscribers are authorized to access said ATM network to setup virtual channel connections for service;

each of said subscribers having an ATM address and a Customer Logical Port (CLP) ID associated therewith; and

a profile array associated with said subscribers wherein a policy feature record is populated for each subscriber with at least one policy feature which indicates a specific treatment for a call to be effectuated relative to said each subscriber.

67. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 66, wherein said at least one policy feature is selected from the group consisting of: a source address validation feature, a maximum call attempt rate limit feature, a destination address screening feature, a source address

screening feature, a maximum burst size limit feature, an aggregate bandwidth limit feature, a service class selection feature, and a maximum concurrent call limit feature.

68. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 67, wherein said virtual channel connections comprise switched connections.

69. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 68, wherein said at least one policy feature is invoked by a trigger received in a signaling message transmitted with respect to said call.

70. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Connect message.

71. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises an Add Party message.

72. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Release message.

73. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Setup message.

74. (withdrawn) A source address validation method operable in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

assigning a port ID to a Customer Logical Port (CLP) served by an ATM node disposed in said network;

associating a customer ID with said CLP wherein a plurality of addresses specified for said customer ID are authorized for use with said CLP;

upon receiving in said ATM node a signaling message from a user operating a customer premises equipment (CPE) through said CLP, determining if said CPE's address belongs to said plurality of addresses authorized for said CLP; and

if so, establishing a virtual channel connection through said ATM network for said user.

75. (withdrawn) A method of restricting call connection attempts by a user in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

specifying a limit on the number of call setup requests received over a predetermined period at a Customer Logical Port (CLP) served by an ATM node disposed in said network;

receiving in said ATM node a signaling message from said user operating a customer premises equipment (CPE) through said CLP;

determining if said limit on the number of call setup requests is exceeded by said signaling message in said predetermined period; and

if said limit on the number of call setup requests is not exceeded by said signaling message in said predetermined period, establishing a virtual channel connection through said ATM network for said user.

76. (withdrawn) A method of screening destination addresses in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a positive list of addresses to which a user is allowed to make call connections;

defining a negative list addresses to which said user is not allowed to make call connections;

receiving in an ATM node a signaling message from said user operating a customer premises equipment (CPE) through a Customer Logical Port served by said ATM node, said signaling message for attempting to setup a call connection to a called party;

determining if said called party's address belongs to said positive list of addresses; and

if so, establishing said call connection through said ATM network for said user.

77. (withdrawn) A method of screening source addresses in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a positive list of addresses from which call connections are allowed to terminate to a user;

defining a negative list addresses from which call connections are not allowed to terminate to said user;

receiving in an ATM node a signaling message from a calling party operating a customer premises equipment (CPE) through a Customer Logical Port served by said ATM node, said signaling message for attempting to setup a call connection to said user;

determining if said calling party's address belongs to said positive list of addresses; and

if so, establishing said call connection through said ATM network for said user.

78. (withdrawn) A method of restricting burst-size requests received for call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a forward burst-size limit allowed for an individual call connection established through a Customer Logical Port served by an ATM node disposed in said network;

defining a backward burst-size limit allowed for said individual call connection established through said CLP;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including at least one of a forward burst-size request and a backward burst-size request;

determining if at least one of said forward burst-size request and said backward burst-size request exceeds said corresponding burst-size limit;

if so, denying said particular call connection through said ATM network for said user.

79. (withdrawn) A class-of-service provisioning method for call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

configuring a plurality of service classes for a Customer Logical Port served by an ATM node disposed in said network;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including a class-of-service request;

determining if said class-of-service request is allowed for said CLP;

if so, establishing said call connection through said ATM network for said user.

80. (withdrawn) A method of restricting the number of concurrent active call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a concurrent call limit allowed for a Customer Logical Port served by an ATM node disposed in said network;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection;

determining if said concurrent call limit for said CLP would be exceeded by said signaling message;

if so, denying said particular call connection through said ATM network for said user.

81. (withdrawn) A bandwidth control method operable in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

specifying a total forward bandwidth allocated for a Customer Logical Port (CLP) served by an ATM node disposed in said network;

specifying a total backward bandwidth allocated for said CLP;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including at least one of a service class request and a plurality of bandwidth parameters;

calculating at least one of a forward bandwidth request and a backward bandwidth request corresponding to said particular call connection;

applying an overbooking factor to at least of said forward bandwidth request and said backward bandwidth request calculated for said particular call connection, thereby-
generating an adjusted forward bandwidth request and an adjusted backward bandwidth request;

computing a remaining bandwidth after accounting for bandwidth in use in each direction;

comparing said adjusted forward bandwidth request and said adjusted backward bandwidth request to said remaining bandwidth in each direction; and

if said adjusted forward and backward bandwidth requests exceed said remaining bandwidth in each direction, establishing said particular call connection through said ATM network for said user.